



## **Environmental Epidemiology and Toxicology Fact Sheet**

There is considerable concern about the contribution of environmental hazards to the development of disease in Louisiana and consequent demand for accurate, accessible environmental health information. Environmental Epidemiology and Toxicology responds to those concerns by:

- Providing information on indoor air quality contaminants (e.g. mold, formaldehyde, foreign drywall) through telephone consultations, environmental educational material development, and targeted outreach (e.g. air quality in schools)
- Addressing requests from the public, government agencies, and the state legislature (e.g. SCR 92-Livonia, HCR 188-Lafarge/Gert Town, HCR 185-foreign drywall) to investigate individual case reports of toxic exposures and conduct disease cluster investigations (e.g. cancer, respiratory, neurological, and reproductive diseases) and/or health studies (e.g. Mississippi Roach Killer, Mossville, Grand Bois).
- Evaluating data on hazardous substances (Comprehensive Environmental Response Compensation and Liability Act (CERCLA), non-CERCLA substances) at hazardous waste sites to determine the potential health effects (e.g. Post-Katrina evaluation of Superfund sites).
- Coordinating with federal and state counterparts to estimate risk of exposure to chemicals with health-based national standards and those without established national standards.
- Evaluating contaminants in locally-caught seafood and, when warranted, issuing health advisories to warn the public and/or making recommendations to reduce exposures to contaminated seafood.
- Evaluating the public health threat of emergency events involving hazardous chemicals and notifying regional staff, affected communities, hospitals, and physicians about the event and the chemicals involved.
- Tracking environmentally-related reportable diseases- exposure to pesticides, mercury, lead, arsenic, cadmium, and carbon monoxide.
- Tracking fatalities, injuries and exposures (e.g. lead, asbestos) among workers.
- Tracking fatalities, injuries and exposures experienced by employees, first responders, and the public during emergency events (e.g. Benzene release near Baton Rouge, Hurricane Katrina/Rita).
- Developing and distributing evidence-based prevention messages for dissemination to at-risk populations, schools, healthcare providers, and communities.
- Partnering with local, state and federal governments, non-profit and faith-based organizations to ensure that the public is informed about environmental health risks.
- Administering and managing activities, personnel, and budgets.

## **Better Health**

Environmental Epidemiology and Toxicology advances the outcome goal of Better Health by mitigating environmental risks which is important to the long term health and well-being of Louisiana's citizens. Its activities advance the goal by providing public health assessments, health consultations, technical assistance, and other services that aid the public and officials in making appropriate public health decisions. Environmental Epidemiology and Toxicology is made up of 16 environmental health professional staff who have earned at least a Masters degree in their field. Their experience and education, combined with selected consultation with state agencies and nationally recognized medical and scientific experts, contribute to the overall efficient and effective functioning of the program. This activity also receives the support of technology experts (GIS and IT). This activity is supported by approximately 50% state and 50% federal (no state match required) funds.

### **Future Funding:**

- A partnership with the LA Dept. of Wildlife and Fisheries is proposed to continue the Mercury Fish Tissue Assessment Program which LA Dept. of Environmental Quality will discontinue at the end of FY10. See APR entitled Evaluation of Mercury in Fish.
- An expanded IAQ program is proposed because of high demand for this service by LA citizens. See APR entitled Indoor Air Quality.

Environmental Epidemiology and Toxicology advances other State Outcome Goals:

1. Diversified Economic Development: A healthy and safe environment free of toxic chemicals contributes to a high quality of life which will attract businesses to our State.
2. Youth Education: Well-maintained school facilities free of environmental hazards are more conducive to learning.
3. Hurricane Protection and Emergency Preparedness: Providing critical information to the public, government officials, and others during emergency events (e.g. chemical releases, hurricanes) is a key component of an effective and efficient response.

## **Evidence**

### **Mandates:**

1. LA Revised Statutes (RS) 36:258
2. RS 40:5

### **Funding Sources:**

#### **Federal:**

National Acute Hazardous Substance Incident Surveillance and Prevention (93.204)

Building the Louisiana Environmental Public Health Tracking Network (93.283)

Occupational Health and Injury Surveillance in Louisiana (93.262)

Program to Conduct and Coordinate Site-specific Activities (93.240)

Preventative Health and Health Studies Block Grant  
Adult Blood Lead Epidemiology and Surveillance (CDC contract)

State:

Health-related Pesticide Incident Reports (LDAF contract)

General Fund

Routine activities- annual average number of:

- Fish advisories=58 (to date)
- LA State Police and National Response Center hazardous incident reports screened=10,720
- Indoor air calls (not including foreign drywall)=734
- Disease cluster investigations=9
- Pesticide exposure investigated = 316
- Heavy metals (lead, mercury, arsenic, cadmium)exposure reports received= 10,745
- Heavy metals exposure cases investigated = 879
- Carbon monoxide hospitalizations/deaths= 65
- Public health consultations/technical assists=22
- Health education and outreach events = 21 (reaching an audience of 25,861 people)

Special activities in FY09:

- At the request of the Governor, Louisiana is working with federal agencies to establish a protocol to assess public health risk and exposure to foreign drywall. (910 foreign drywall calls received to date)
- Supported OPH Regional technology growth by providing video-conferencing equipment, GIS software and training to local staff to enhance capacity for early detection of environmental public health threats.
- Developed an outreach program, the Louisiana Children's Environmental Health Initiative that relies on collaboration among federal, state and local agencies to educate families and health care providers about environmental health hazards to children and to promote a healthy environment in which they can grow.